As a named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated next to my name;

I believe I am the original, first and sole inventor (if only one name is listed) or an original, first and joint inventor (if plural names are listed in the signatory page(s) commencing at page 3 hereof) of the subject matter which is claimed and for which a patent is sought on the invention entitled

NUCLEA	R FACTORS ASSO	OCIATED WITH TRANS	SCRIPTIONAL RE	EGULATION
the spec	cification of	which (check one)	j	_
<u></u>	is attached he	reto.		
	was filed on _ Application Se and was amende	November 13, 199 erial No. 07/791, ed on	1 as 898 (if	applicable).
contents	s of the above	hat I have review identified speci 	lfication, inc	luding the
materia:	l to the exami	e duty to disclos nation of this ap of Federal Regulat	oplication in	accordance
United a patent of identification	States Code, Sor inventor's ied below any r's certificat	foreign priority by 119 of any foreign certificate liste foreign applicate having a filing priority is claim	yn application ed below and h ion for patent y date before	n(s) for nave also c or
	Pric	or Foreign Applica	ation(s)	Priority Claimed
(Number) (Country)	(Day/Month/Year	filed)	Yes No
(Number) (Country)	(Day/Month/Year	filed)	Yes No
(Number) (Country)	(Day/Month/Year	filed)	Yes No

06/817,441	January 9, 1986	Abandoned
07/155,207	February 12, 1988	Abandoned
07/280,173	December 5, 1988	Pending
07/341,436	April 21, 1989	Pending
07/162,680	March 1, 1988	Abandoned
07/318,901	March 3, 1989	Pending
06/946,365	December 24, 1986	Pending

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I also hereby grant additional Powers of Attorney to the following attorney(s) and/or agent(s) to file and prosecute an international application under the Patent Cooperation Treaty based upon the above-identified application, including a power to meet all designated office requirements for designated states.

David E. Brook	Registration	No.	22,592
James M. Smith	Registration	No.	28,043
Leo R. Reynolds	Registration	No.	20,884
Richard A. Wise	Registration	No.	18,041
Patricia Granahan	Registration	No.	32,227
Mary Lou Wakimura	Registration	No.	31,804
Thomas O. Hoover	Registration	No.	32,470
Alice O. Carroll	Registration	No.	33,542

and	
Send correspondence to: PHAMILTON, BROOK, SMITH & RETWO Militia Drive, Lexingto	
Direct telephone calls to:	Patricia Granahan, Esq.
617-861-6240	

Full name of sole				
or first inventor	David Baltimore			
Inventor's	David Baitimore			
Signature	Dato			
Pesidence	President's House Pockefeller Universit			
Nest delice	President's House, Rockefeller Universit 1230 York Avenue, New York, NY 10021 U.S.A.			
Citizenship	II C A			
Post Office Address				
	Same as above			
Dull	• ,			
Full name of second jo	oint			
inventor, if any	Kanjan Sen			
Second Inventor's				
Signature	DateDate			
kesidence	236 Allston Street			
	Cambridge, MA 92139			
Citizenship	India			
Post Office Address	same as above			
Full name of third join	int			
inventor, if any	Phillip A. Sharp			
mira mivemor's				
Signature	Date			
Residence	119 Grasmere Street			
	Newton, MA 02158			
Citizenship	U.S.A.			
Post Office Address	same as above			
Full name of fourth jo	pint			
inventor, if any	Harinder Singh			
rourth inventor's				
Signature	Date			
Residence	1700 East 56th Street, #1309			
	Chicago, IL 60637-1934			
Citizenship	India			
Post Office Address	same as above			

Full name of fifth jo	oint
inventor, if any	Louis Staudt
Fifth Inventor's	
Signature	Date
Residence	9309 Greyrock Road
	Silver Springs, MD 20910
Citizenship	U.S.A.
Post Office Address	same as above
Full name of sixth jo	pint
inventor, if any	Jonathan LeBowitz
Sixth inventor's	
Signature	Date
	27 Crescent Road
	Belmont, MA 02178
Citizenship	U.S.A.
Post Office Address	same as above
Full name of seventh	ioint
inventor, if any	Albert S. Baldwin, Jr.
Seventh Inventor's	Marche D. Buldwill, UI.
Signature	Date
Residence	34 South Gate Park
	West Newton, MA 02165
Citizenship	U.S.A.
Post Office Address	same as above
Full name of eighth jo	oint G./
inventor, if any	
Eighth Inventor's	2 44.
Signature	Date 0, //11
Residence	129 Parsons Road KuGELFANG 42
	Brighton, MA 02:135 CH-UNI THE WAFE IN THE
CICICENSHIP	Switzerland
Post Office Address	same as above
D	• .
Full name of ninth joi	Int
inventor, if any	Lynn M. Corcoran
Ninth inventor's	
Signature	Date
Residence	109 Beacon Street, Apt. 1
Citizenship	Boston, MA 02116
Post Office Address	U.S.A.
rose office wddfess	same as above

1.

Full name of tenth joint	•
inventor, if any	Patrick A. Baeuerle
Fifth Inventor's	•
Signature	Date
Residence	All podel 72
	D-8031 Eichenau, Germany
Citizenship	Germany
Post Office Address	same as above
	و سنة منت
Full name of eleventh j	oint
inventor, if any	Michael J. Lenardo
Sixth inventor's	
Signature	Date
Residence	9117 Falls Chapel Way
	Date 9117 Falls Chapel Way Potomac, MD 20854-2453 U.S.A.
Citizenship	U.S.A.
Post Office Address	same as above
Full name of twelfth jo	
inventor, if any	Chen-Ming Fan
Seventh Inventor's	
Signature	Date
Residence	30 Warren Avenue, Apt. 2A
5/1/	Somerville, MA 02143
Citizenship	Taiwan
Post Office Address	same as above
Full name of thirteenth	ioint
inventor, if any	
Eighth Inventor's	Tom Maniacis
Signature	Date
Residence	Date 456 Belmont Street, Apt. 17
7.007.401.00	Watertown, MA 02172
Citizenship	U.S.A.
Post Office Address	same as above
	Same as above
Full name of fourteenth	ioint .
	3020
Ninth inventor's	
Signature	Dat e
Residence	
Citizenship	

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NUCLEAR FACTORS ASSOCIATED WITH TRANSCRIPTIONAL REGULATION

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/	is a	attached he	ereto	٥.						
<u> [XX]</u>	App.	filed on _ lication Se was amende	erial	L No	er 13, 07/7	. 1991 791,89	8	_ as - (if -	appl	icab]
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David E. Brook James M. Smith Leo R. Reynolds Richard A. Wise Patricia Granahan Mary Lou Wakimura Thomas O. Hoover Alice O. Carroll	Registration No. 22,592 Registration No. 28,043 Registration No. 20,884 Registration No. 18,041 Registration No. 32,227 Registration No. 31,804 Registration No. 32,470 Registration No. 33,542
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and	
Send correspondence to: Pa HAMILTON, BROOK, SMITH & REY Two Militia Drive, Lexington	atricia Granahan, Esq. YNOLDS, P.C. n, MA 02173
Direct telephone calls to:	Patricia Granahan, Esq.
617-861-6240	

Full name of sole	
or first inventor	David Baltimore
Inventor's	
Signature	Date
Residence	President's House, Rockefeller University
	President's House, Rockefeller University 1230 York Avenue, New York, NY 10021 U.S.A.
Citizenship	U.S.A.
Post Office Address	same as above
Co. (co. (co. (co. (co. (co. (co. (co. (c	
Full name of second je	
inventor, if any	Ranjan Sen
Second Inventor's	
Signature	Date 236 Allston Street Cambridge, MA 92139
Residence	236 Allston Street
	Cambridge, MA 92139
Citizenship	India
Post Office Address	same as above
Full name of third jo:	int Phillip A. Sharp
Third Inventor's	THITTIP A. SHAIP
Signature	Data
Pesidence	Date
11001401100	Newton MX 02150
Citizenship	U.S.A.
Post Office Address	same as above
Contract the contract to the c	
Full name of fourth jo	
Inventor, II any	Harinder Singh
Fourth Inventor's	
Signature	Date
kesidence	1700 East 56th Street, #1309
Oiticonobie	Chicago, IL 60637-1934
Citizenship	India
Post Office Address	same as above

Full name of fifth joi	nt
inventor, if any	Louis Staudt
Fifth Inventor's	
	Date
Residence	9309 Grevrock Road
	Cilvar Surinos, rid 20210
Citizenship	U.S.A.
Post Office Address	same as above
	·
Full name of sixth jo	Int
inventor, if any	Jonathan LeBowitz
Sixth Inventor's	Date
Signature	27 Crescent Road Belmont, MA 02178
Residence	Belmont, MA 02178
Citizenship	U.S.A. same as above
Post Office Address	
Full name of seventh	joint
inventor, if any	Albert S. Baldwin, Jr.
Seventh Inventor's	
Signature	Date 34 South Gate Park West Newton, MA 02165
Residence	34 South Gate Park
	THE OCCUPANT OF THE OCCUPANT O
Citizenship	U.S.A.
Post Office Address_	same as above
	. 9 4.
Full name of eighth j	Oint Clore
inventor, if any	Roger Clerc
Eighth Inventor's	Date
Signature	129 Parsons Road
Residence	Brighton, MA 02135
	Switzerland
Citizenship	Switzerrand
Post Office Address_	Same as above
Full name of ninth jo	nint
inventor, if any	Lynn M. Corcoran
vinth inventor's	
Ninth inventor 5	Date to the Manney of the Date to the Manney of the Manney
Posidonce.	31 Bridge Street
kesidence	31 Bridge Street Port Melbourne, Victoria Australia 3207
Citizenship	U.S.A.
Post Office Address_	
1000 011100	

Full name of tenth join	:
	Patrick A. Baeuerle
Fifth Inventor's	
Signature	Date
Residence	Am Bogen 25
•	D-8031 Eichenau, Germany
	Germany
Post Office Address	same as above
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mall mans of alamanth d	-2
Full name of eleventh j	Oint Michael I I I annua
Sixth Inventor's	Michael J. Lenardo
Signature	Date
Residence	9117 Falls Chapel Way
Residence	Potomac, MD 20854-2453
Citizenship	U.S.A.
Post Office Address	same as above

Full name of twelfth jo	int
inventor, if any	Chen-Ming Fan
Seventh Inventor's	•
Signature	Date
Residence	30 Warren Avenue, Apt. 2A
Citizenship	Somerville, MA 02143 Taiwan
Post Office Address	same as above
	June us above
Full name of thirteenth	
inventor, if any	Tom Maniatis
Eighth Inventor's	
Signature	Date
Residence	456 Belmont Street, Apt. 17
Citionahin	Watertown, MA 02172 U.S.A.
Citizenship Post Office Address	
	same as above
Full name of fourteenth	ioint
	,
Ninth inventor's	
Signature	Date
Residence	
Citizenship	
Doct Office Address	

STATES PATENT AND TRADEM

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the specification of which (check one)	
is attached hereto.	
was filed on November 13, 1991 Application Serial No. 07/791,898 and was amended on	_ as - (if applicable) -
I hereby state that I have reviewed and contents of the above-identified specificatio claims, as amended by any amendment referred	n, including the to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, \$119 of any foreign application(s) for patent or inventor's certificate listed below and have also-identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

	<u>Prio</u>	r Foreign Application(s)	Priority Claimed
(Number)	(Country)	(Day/Month/Year filed)	Yes No
(Number)	(Country)	(Day/Month/Year filed)	Yes No
(Number)	(Country)	(Day/Month/Year filed)	Yes No

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Mary Lou Wakimura	Registration	No.	31,804
Thomas O. Hoover	Registration	No.	32,470
Alice O. Carroll	Registration	No.	33,542

Send correspondence to: PHAMILTON, BROOK, SMITH & RE	
Two Militia Drive, Lexingto	
Direct telephone calls to:	Patricia Granahan, Esq.
617-861-6240	

Thill mame of 1-					
Full name of sole					
	David Baltimore				
Inventor's					
Signature	Date President's House, Rockefeller Universit				
Residence	president's house, Rockeleller Univers				
	1230 York Avenue, New York, NY 10021				
Citizenship	U.S.A.				
Post Office Address					
Full name of second jo					
inventor, if any	Ranjan Sen				
Second Inventor's					
Signature	Date 236 Allston Street Cambridge, MA 92139				
Residence	236 Allston Street				
	Cambridge, MA 92139				
Citizenship	India				
Post Office Address	same as above				
Full name of third joi	int.				
	Phillip A. Sharp				
mbina Tunnatania	THITTED III DHALD				
'UDITO INVENTAT'S					
Third Inventor's					
Signature	Date				
Signature	Date				
Signature	Date				
Signature Residence Citizenship	Date 119 Grasmere Street Newton, MA 02158 U.S.A.				
Signature Residence Citizenship	Date 119 Grasmere Street Newton, MA 02158 U.S.A. same as above				
Signature Residence Citizenship	Date 119 Grasmere Street Newton, MA 02158 U.S.A.				
Signature Residence Citizenship Post Office Address Full name of fourth jo	Date 119 Grasmere Street Newton, MA 02158 U.S.A. same as above				
Signature Residence Citizenship Post Office Address Full name of fourth jo	Date 119 Grasmere Street Newton, MA 02158 U.S.A. same as above				
Signature Residence Citizenship Post Office Address Full name of fourth joinventor, if any Fourth Inventor's	Date 119 Grasmere Street Newton, MA 02158 U.S.A. same as above Dint Harinder Singh				
Signature Residence Citizenship Post Office Address Full name of fourth joinventor, if any Fourth Inventor's	Date 119 Grasmere Street Newton, MA 02158 U.S.A. same as above Dint Harinder Singh				
Signature Residence Citizenship Post Office Address Full name of fourth joinventor, if any Fourth Inventor's Signature	Date 119 Grasmere Street Newton, MA 02158 U.S.A. same as above Dint Harinder Singh Date				
Signature Residence Citizenship Post Office Address Full name of fourth joinventor, if any Fourth Inventor's	Date 119 Grasmere Street Newton, MA 02158 U.S.A. same as above Dint Harinder Singh Date 1700 East 56th Street, #1309				
Signature Residence Citizenship Post Office Address Full name of fourth joinventor, if any Fourth Inventor's Signature	Date 119 Grasmere Street Newton, MA 02158 U.S.A. same as above Dint Harinder Singh				

	-4-
Full name of fifth jos	
inventor, if any	Louis Staudt
Fifth Inventor's	
Signature	Date
Residence	9309 Greyrock Road
	Silver Springs, MD 20910
Citizenship	U.S.A.
Post Office Address	same as above
Full name of sixth jo	int
	Jonathan LeBowitz
Sixth Inventor's	
Signature	Date
Residence	27 Crescent Road
	Delmone, PA 02170
Citizenship	U.S.A.
Post Office Address	same as above
Full name of seventh	ioint
	Albert S. Baldwin, Jr.
Seventh Inventor's	Albert 5. baluwing of.
Cianatuwa	Date
Residence	34 South Gate Park West Newton, MA 02165
	West Newton, MA 02165
Citizenship	U.S.A.
Post Office Address	same as above
Full name of eighth j	oint
inventor, if any	
Eighth Inventor's	noger crerc
Signature	Date
Residence	129 Parsons Road
	Brighton, MA 02135
Citizenship	Switzerland
Post Office Address	same as above
Full name of ninth jo	int
inventor, if any	
Ninth inventor's	
Signature	Date
Residence	109 Beacon Street, Apt. 1
	Boston, MA 02116
Citizenship	U.S.A.
Post Office Address	same as above

Full name of tenth joint	•
inventor, if any	Patrick A. Baeuerle
Fifth Inventor's	
Signature / Of	72 — Date 12/27/9
Residence	1ML DOGC11 23
_	D-8031 Eichenau, Germany
Citizenship	Germany
Post Office Address	same as above
Full name of eleventh j	oint
inventor, if any	Michael J. Lenardo
Signature	Dat e
Residence	9117 Falls Chapel Way
	Date 9117 Falls Chapel Way Potomac, MD 20854-2453 U.S.A.
Citizenship	U.S.A.
Post Office Address	same as above
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mu33	
Full name of twelfth jo	int
inventor, if any	Chen-Ming Fan
Seventh Inventor's	
Signature	Date
Residence	Date 30 Warren Avenue, Apt. 2A Somerville, MA 02143
Citizenship Post Office Address	Taiwan
Post Office Address	same as above
Full name of thirteenth	ioint
inventor, if any	Tom Maniatic
Eighth Inventor's	
SignatureResidence	Nate
Residence	Date 456 Belmont Street, Apt. 17
	Watertown, MA 02172
Citizenship	U.S.A.
Post Office Address	same as above
-	Jame as above
and the first the first that the first the fir	
Full name of fourteenth	ioint
inventor, if any	Jorne
Ninth inventor's	
Signature	Date
Residence	
Citizenship	
Don't occ.	reportunger As a contract of the contract of t

As a named inventor, I hereby declare that:

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the spec	cification of	which (chec	k one)			
	is attached he	ereto.	•			
7	was filed on Application Se and was amende	erial No. 0	3, 1991 7/791,898	as (if	applic	able)
contents	nereby state to s of the above as amended by	-identified	specifica	ition, inc	luding	
material	acknowledge th 1 to the exami tle 37, Code o	nation of t	his applic	cation in	accord	
United Spatent of identify inventor	nereby claim for the states Code, Sor inventor's ied below any r's certificat tion on which	119 of any certificate foreign app ce having a	foreign and listed be lication filing date	oplication elow and h for patent	(s) for all	r so-
	Pric	or Foreign A	pplication	n(s)		rity imed
(Number)	(Country)	(Day/Month	/Year file	ed)	Yes/	/No
(Number)	(Country)	(Day/Month	/Year file	ed)	Yes .	/No
(Number)	(Country)	(Day/Month	/Year file	ed)	Yes .	No

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Thomas O. Hoover	Registration	No.	32,470
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and	
Send correspondence to: PHAMILTON, BROOK, SMITH & RETWO Militia Drive, Lexingto	YNOLDS, P.C.
Direct telephone calls to:	Patricia Granahan, Esq.
617-861-6240	

Full name of sole	
or first inventor	David Baltimore
Inventor's	24124 2422
	Date
Residence	President's House, Rockefeller Universit
NCB14choc	President's House, Rockefeller Universit 1230 York Avenue, New York, NY 10021
Citizenship	ΙΙ ς Δ
Post Office Address	same as above
Full name of second jo	
inventor, if any	Ranjan Sen
Second Inventor's	
Signature	Date 236 Allston Street Cambridge, MA 92139 India same as above
Residence	236 Allston Street
	Cambridge, MA 92139
Citizenship	India
Post Office Address	same as above
Full name of third joi	int
	Phillip A. Sharp
Third Inventor's	FILLITY A. Sharp
	Date
Pesidence	Date 119 Grasmere Street Newton, MA 02158
residence	Newton, MA 02158
Post Office Address	U.S.A.
Fost Office Address	same as above
Full name of fourth jo	pint
	Harinder Singh
Fourth Inventor's	
Signature	Date
Residence	1700 East 56th Street, #1309
	Chicago, IL 60637-1934
Citizenship	India
Post Office Address	same as above
	Same as above

Full name of fifth joi	nt
inventor, if any	Louis Staudt
Fifth Inventor's	
Signature	Date
Residence	9309 Greyrock Road
	Silver Springs, MD 20910
Citizenship	U.S.A.
Post Office Address	same as above
Full name of sixth joi	n+
Sixth Inventor's	Jonathan LeBowitz
	Date
SignatureResidence	27 Crescent Road
Residence	Belmont, MA 02178
Citizenship	U.S.A.
Post Office Address	same as above
Full name of seventh j	
inventor, if any	Albert S. Baldwin, Jr.
Seventh Inventor's	
Signature	Date
Residence	34 South Gate Park
	West Newton, MA 02165
Citizenship	U.S.A.
Post Office Address	same as above
Full name of eighth jo	pint
inventor, if any	
Eighth Inventor's	
Signature	Date
Residence	129 Parsons Road
	Brighton, MA 02135
	Switzerland
Post Office Address	same as above
Full name of ninth joi	
inventor, if any	Lynn M. Corcoran
Ninth inventor's	5
Signature	Date
Residence	109 Beacon Street, Apt. 1
Citigonchin	Boston, MA 02116
Citizenship	U.S.A.
Post Office Address	same as above

)

Full name of tenth joint	
inventor, if any	Patrick A. Baeuerle
Fifth Inventor's	•
Signature	Date
Residence	Am Bogen 25
	D-8031 Elchenau, Germany
Citizenship	Germany
Post Office Address	same as above
Full name of eleventh j	oint
inventor, if any	Michael J Lenardo
Sixth Inventor's	Michael J. Lenardo Date 1/6/91 9117 Falls Chapel Way
Signature While	1/2/ ml Date 1/6/91
Posidonce To temp	9107 Falls Changle Way
Residence	Potomag MD 20054 2452
211	91/17 Falls Chapel Way Potomac, MD 20854-2453 U.S.A.
Citizenship	U.S.A.
Post Office Address	same as above

Full name of twelfth jo	
inventor, if any	Chen-Ming Fan
Seventh Inventor's	
Signature	Date
Residence	30 Warren Avenue, Apt. 2A
	Somerville, MA 02143
Citizenship	Taiwan
Post Office Address	same as above
Full name of thirteenth	joint
inventor, if any	
Eighth Inventor's	
Signature	Date
Residence	456 Belmont Street, Apt. 17
	Watertown, MA 02172
Citizenship	II S A
Post Office Address	same as above
Full name of fourteenth	· ioint
inventor if and	JOING
Minth inventoria	
Ninth inventor's	
Signature	Date
Residence	
Citizenship	
Post Office Address	The state of the s

(Number)

(Number)

(Country)

(Country)

Declaration for Patent Application

As a named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated next to my name;

I believe I am the original, first and sole inventor (if only one name is listed) or an original, first and joint inventor (if plural names are listed in the signatory page(s) commencing at page 3 hereof) of the subject matter which is claimed and for which a patent is sought on the invention entitled

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	is attached h	ereto.		
	was filed on Application S and was amend	November 13, erial No. 07/7 ed on	01 000	as (if applicable)
conter	hereby state its of the above , as amended by	e-identified s	pecification	, including the
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United patent identiinvent	States Code, ; or inventor's fied below any	\$119 of any for certificate languages foreign appli- te having a fi	reign applic isted below cation for p ling date be	and have also
	Pri	or Foreign App	lication(s)	Priority Claimed
(Numbe	r) (Country)	(Day/Month/Y	ear filed)	
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(Day/Month/Year filed)

(Day/Month/Year filed)

06/817,441	January 9, 1986	Abandoned
07/155,207	February 12, 1988	Abandoned
07/280,173	December 5, 1988	Pending
07/341,436	April 21, 1989	Pending
07/162,680	March 1, 1988	Abandoned
07/318,901	March 3, 1989	Pending
06/946,365	December 24, 1986	Pending

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

I also hereby grant additional Powers of Attorney to the following attorney(s) and/or agent(s) to file and prosecute an international application under the Patent Cooperation Treaty based upon the above-identified application, including a power to meet all designated office requirements for designated states.

David E. Brook	Registration		
James M. Smith	Registration	No.	28,043
Leo R. Reynolds	Registration	No.	20,884
Richard A. Wise	Registration	No.	18,041
Patricia Granahan	Registration	No.	32,227
Mary Lou Wakimura	Registration	No.	31,804
Thomas O. Hoover	Registration	No.	32,470
Alice O. Carroll	Registration	No.	33,542

allu	
Send correspondence to: PHAMILTON, BROOK, SMITH & RETWO Militia Drive, Lexingto	
Direct telephone calls to:	Patricia Granahan, Esq.
617-861-6240	

Full name of sole	
	David Baltimore
Inventor's	
Signature	President's House, Rockefeller Universit
Residence	President's House, Rockefeller Universit
	1230 York Avenue, New York, NY 10021
Citizenship	U.S.A.
Post Office Address	same as above
Full name of second jo	
inventor, if any	Ranjan Sen
Second Inventor's	
Signature	Date 236 Allston Street Cambridge, MA 92139 India same as above
Residence	236 Allston Street
	Cambridge, MA 92139
Citizenship	India
Post Office Address	same as above
	• .
Full name of third jo:	
inventor, if any	Phillip A. Sharp
Third Inventor's	
Signature	Date
Residence	Date 119 Grasmere Street
	Newton, MA U2138
Citizenship	U.S.A.
	same as above
Full name of fourth jo	
inventor, if any	Harinder Singh
Fourth Inventor's	
Signature	Date
Residence	1700 East 56th Street, #1309
	Chicago, IL 60637-1934
Citizenship	India
Post Office Address	same as above

Tull mame of fifth joir	· ·
Full name of fifth joir	
Fifth Inventor's	Louis Staudt
	Date
Signature	0200 Charmack Boad
Residence	9309 Greyrock Road Silver Springs, MD 20910
all	Silver Springs, MD 20910
Citizenship	U.S.A.
Post Office Address	same as above
Full name of sixth joir	
inventor, if any	Jonathan LeBowitz
Sixth Inventor's	
Signature	Date
Residence	27 Crescent Road
	Belmont, MA 02178
Citizenship	U.S.A.
Post Office Address	same as above
Full name of seventh jo	nint
	Albert S. Baldwin, Jr.
Seventh Inventor's	Albeit 5. Daldwin, 51.
01 h	Date
Signature	34 South Gate Park
Residence	West Newton, MA 02165
Citizenship	U.S.A.
Post Office Address	
1000 011100 11441000	Damo do aporto
	94
Full name of eighth jo	
inventor, if any	Roger Clerc
Eighth Inventor's	Daka
Signature	Date
Residence	129 Parsons Road
	Brighton, MA 02135
Citizenship	Switzerland
Post Office Address	same as above
Full name of ninth joi:	nt
	Lynn M. Corcoran
Ninth inventor's	
Signature	Date
Residence	109 Beacon Street, Apt. 1
	Boston, MA 02116
Citizenship	U.S.A.
Post Office Address	same as above

Full name of tenth joint	:	
	Patrick A. Baeuerle	
Fifth Inventor's		
	Date	
SignatureResidence	Am Bogen 25	
	D-8031 Eichenau, Germany	
Citizenship	(-ermany	
Post Office Address	same as above	
Full name of eleventh j	oint Michael Z. T. T.	
Sixth Inventor's	Michael J. Lenardo	
STYCH THACHEOR 2		
Residence	9117 Falls Chapel Way Potomac MD 20054-2452	
	9117 Falls Chapel Way Potomac, MD 20854-2453 U.S.A. same as above	
Citizenship	U.S.A.	
Post Office Address	same as above	
Full name of twelfth jo	int	
inventor, if any		
Seventh Inventor's	Somerville, MA 02143 Sau Handisco, MA CALC Taiwan	
Signature	Date 1371 91	
Residence	Somewille W. 20142 Apt. 2A Jaio Funston Art. 11	>
Citizenship	This Sai Hancisco, MA C > / 6	'3
CICIECHSHIP	Taiwan same as above	
FORE Office Address		
Full name of thirteenth	4.4.4	
inventor, if any		
Eighth Inventor's	Tom Maniacis	
Signature	Date	
Residence	456 Belmont Street, Apt. 17	
Nebruciioc	Watertown, MA 02172	
Citizenship	U.S.A	
Post Office Address	same as above	
\$50 ftm \$100 text text text text text text text te		
Full name of fourteenth	ioint	
inventor, if any		
Ninth inventor's		
	Date	
Residence		
Citizenship		

As a named inventor, I hereby declare that:

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NUCLE	AR FAC	TORS ASSO	CIATED WIT	TH TRANS	CRIPTION	AL REG	ULATION
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the sp	ecific	ation of w	hich (che	ck one)			
	is at	tached her	reto.				
<u>/xx/</u>	was f Appli and w	iled on cation Ser as amended	November rial No l on	13, 199 07/791,	l 398	as (if a	pplicable)
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materi	al to	wledge the the examin 7, Code of	nation of	this ap	plicatio	n in a	ccordance
United patent identi invent	State or in fied b or's o	y claim for some control of contr	119 of any certificat foreign ap e having a	y foreig e liste plicati a filing	n appliced below on for perdate be	ation(and ha atent	s) for _ ve also-
		Prio	r Foreign	Applica	tion(s)		Priority Claimed
(Numbe	er) ((Country)	(Day/Mon	h/Year	filed)	·····	Yes No
(Numbe	er) ((Country)	(Day/Mon	th/Year	filed)		Yes No
(Numbe	er) ((Country)	(Day/Mon	th/Year	filed)		Yes No

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David E. Brook	Registration	No.	22,592
James M. Smith	Registration	No.	28,043
Leo R. Reynolds	Registration	No.	20,884
Richard A. Wise	Registration	No.	18,041
Patricia Granahan	Registration	No.	32,227
Mary Lou Wakimura	Registration	No.	31,804
Thomas O. Hoover	Registration	No.	32,470
Alice O. Carroll	Registration	No.	33,542

and	
Send correspondence to: PHAMILTON, BROOK, SMITH & RETWO Militia Drive, Lexingto	
Direct telephone calls to:	Patricia Granahan, Esq.
617-861-6240	

Full name of sole			
or first inventor	David Baltimore		
Inventor's			
Signature	Date		
Residence	President's House, Rockefeller Universit		
	1230 fork Avenue, New fork, NY 10021		
Citizenship	U.S.A.		
Post Office Address	same as above		
Full name of second jo			
inventor, if any	Ranjan Sen		
Second Inventor's			
Signature	Date		
Residence	236 Allston Street		
	Cambridge, MA 92139 India		
Citizenship_	India		
Post Office Address	same as above		
) 16 18 18 18 18 18 18 18 18 18 18 18 18 18		
Full name of third joi	nt		
inventor, if any	Phillip A. Sharp		
Third Inventor/e			
Signature	Date		
Residence	119 Grasmere Street		
	Date 119 Grasmere Street Newton, MA 02158		
Citizenship	U.S.A.		
Post Office Address	same as above		
Full name of fourth jo	pint		
inventor, if any	Harinder Singh		
FOURTH INVENTOR'S			
Signature	Date 1700 East 56th Street, #1309 Chicago, IL 60637-1934		
Residence	1700 East 56th Street, #1309		
	Chicago, IL 60637-1934		
Citizenship	India		
Post Office Address	same as above		
FOSC Office Address	same as above		

Hull mame of fifth iois	
Full name of fifth join	
inventor, if any Fifth Inventor's	Louis Staudt
Signature	Date
Residence	9309 Crownork Poad
	Silver Springs, MD 20910
Citizenship	U.S.A.
Post Office Address	same as above
	
Full name of sixth join	
inventor, if any	Jonathan LeBowitz
Sixth Inventor's	
Signature	Date
Residence	27 Crescent Road
	Belmont, MA 02178
Citizenship	U.S.A.
Post Office Address	same as above
Full name of seventh jo	nint
	Albert S. Baldwin, Jr.
Seventh Inventor's	AIDCIC D. Dalawin, Di.
	Date
Residence	Date 34 South Gate Park Wort Nouton Ma 02165
	West Newton, MA 02165
Citizenship	U.S.A.
Post Office Address	same as above
m	tu k
Full name of eighth joi	
inventor, if any	Roger Clerc
Eighth Inventor's	Doto
SignatureResidence	DateDate
nestucinee	Brighton, MA 02135
	Switzerland
Post Office Address	same as above
	
Full name of ninth joir	nt
inventor, if any	Lynn M. Corcoran
Ninth inventor's	
Signature	Date
Residence	109 Beacon Street, Apt. 1
	Boston, MA 02116
Citizenship	U.S.A.
Post Office Address	same as above

Full name of tenth joint		
inventor, if any	Patrick A. Baeuerle	
Fifth Invantorio		
SignatureResidence	Date	
Residence	Am Bogen 25	
	D-8031 Eichenau, Germany	
Citizenship	Germany	
Post Uffice Address	same as above	
Full name of eleventh j	oint	
inventor, if any	Michael J. Lenardo	
SIXIII (IIVEIIIO) S		
Signature	Date	
Residence	9117 Falls Chapel Way	
	Potomac, MD 20854-2453	
Citizenship	U.S.A.	
Post Office Address	Date 9117 Falls Chapel Way Potomac, MD 20854-2453 U.S.A. same as above	
Full name of twelfth jo	int	
inventor, if any	Chen-Ming Fan	
Seventh Inventor's	No.4-a	
Signature	Date 30 Warren Avenue, Apt. 2A	
Residence	Companilla MA 02142	
Citizenship	Somerville, MA 02143 Taiwan	
Post Office Address	same as above	
1050 011100	Sume as above	
Tull name of thirt south		
Full name of thirteenth		
Fighth Inventorin	Tom Maniatis Thomas P. Maniatis	
Signature W/-0466	Date 1/22/97 456 Belmont Street, Apt. 17 Watertown MA 02122	
Residence	456 Belmont Street Ant 17 197 March Church	
Neb2donoo	Watertown, MA 02172 Belmont, MA 02178	1
Citizenship	U.S.A.	í
Post Office Address	same as above	
	The same and also done done done done done done done don	
m 33		
Full name of fourteenth	joint	
inventor, if any		
Ninth inventor's	Monest Date 1/22/91	
Signature World Residence	1. one 1172191	
Vestrence		
Citizenship		
Dock Office 223		

As a named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated next to my name;

I believe I am the original, first and sole inventor (if only one name is listed) or an original, first and joint inventor (if plural names are listed in the signatory page(s) commencing at page 3 hereof) of the subject matter which is claimed and for which a patent is sought on the invention entitled

NUCLEAR	FACTORS ASSO	CIATED WI	TH TRANS	CRIPTION	AL REC	GULAT	ION
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the spec	ification of	which (che	ck one)				
i	s attached he	reto.	•	•••			
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contents	ereby state to of the above as amended by	-identifie	d specif	ication,	incl	uding	
material	cknowledge th to the exami le 37, Code o	nation of	this app	lication	n in a	ccord	is ance
United Separate or identification inventor	ereby claim f tates Code, § r inventor's ed below any 's certificat ion on which	119 of any certificat foreign ap a having a	foreign e listed plication filing	n applica N below a on for pa date bea	ation(and ha atent	(s) for	so-
	Pric	r Foreign	Applicat	cion(s)			rity imed
(Number)	(Country)	(Day/Mont	h/Year i	iled)		/Yes	/No
(Number)	(Country)	(Day/Mont	h/Year i	iled)		/_/ Yes	No
(Number)	(Country)	(Day/Mont	h/Year 1	iled)		/_/ Yes	/No

06/817,441	January 9, 1986	Abandoned
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Leo R. Reynolds	Registration	No.	20,884
Richard A. Wise	Registration		
Patricia Granahan	Registration	No.	32,227
Mary Lou Wakimura	Registration		
Thomas O. Hoover	Registration		
Alice O. Carroll	Registration		
Alice U. Calluli	Regiscracion	110.	331342

and	
Send correspondence to: P HAMILTON, BROOK, SMITH & RE Two Militia Drive, Lexingto	
Direct telephone calls to:	Patricia Granahan, Esq.
617-861-6240	

Full name of sole				
or first inventor	David Baltimore			
Inventor's				
Signature	Date			
Pocidonae	President's House, Rockefeller Univers			
	1230 York Avenue, New York, NY 10021			
Citizenship	U.S.A.			
Citizenship	same as above			
	, <u>, , , , , , , , , , , , , , , , , , </u>			
Full name of second jo				
inventor, if any	Ranjan Sen			
Second Inventor's	Data			
Signature	Date			
Residence				
	Cambridge, MA 92139			
Citizenship	India			
Post Office Address	same as above			
Full name of third joi	int			
	Phillip A. Sharp			
Third Inventor's	Initity A. Sharp			
Signature	Date			
Pasidance	Date			
Residence	Newton MA 02159			
Citizenshin	119 Grasmere Street Newton, MA 02158 U.S.A.			
Citizenship	same as above			
Post Office Address	Same as above			
Full name of fourth jo				
	Harinder Singh			
Fourth Inventor's				
Signature	Date			
Residence	1700 East 56th Street, #1309			
	Chicago, IL 60637-1934			
Citizenship	India			
Post Office Address	same as above			

Full name of fifth join	t				
inventor, if any	Louis Staudt				
Fifth Inventor's					
Signature of	un M. (- Hand Date 1-10-92				
Residence	9309 Greyrock Road				
	Silver Springs, MD 20910				
Citizenship	U.S.A.				
Post Office Address	same as above				
Full name of sixth join	±				
inventor, if any					
Sixth Inventor's	Donachan Debowicz				
	Date				
SignatureResidence	27 Grand Park				
Residence	Polmont MA 02179				
Citizenship	Belmont, MA 02178				
Post Office Address	U.S.A.				
Fost office Address	same as above				
+					
Full name of seventh jo	int				
inventor, if any	Albert S. Baldwin, Jr.				
Seventh Inventor's					
Signature	Date				
Signature Residence	34 South Gate Park				
	West Newton, MA 02165				
Citizenship	U.S.A.				
Post Office Address	same as above				
Full name of eighth joi	n+				
inventor, if any					
Eighth Inventor's	ROGEL CIEIC				
Signature	Date				
Residence					
<u> </u>	Deighton Ma 02125				
Citizenship	Switzerland				
Citizenship	came as above				
1050 011100 11441050	bane as above				
Full name of ninth join	t				
inventor, if any	Lvnn M. Corcoran				
Ninth inventor's					
Signature	Date				
Residence	109 Beacon Street, Apt. 1				
	Boston, MA 02116				
Citizenship	U.S.A.				
Post Office Address	same as above				
					

:

)

Full name of tenth join					
inventor, if any	Patrick A. Baeuerle				
Fifth Inventor's	•				
Signature	Date				
Residence	Am Bogen 25				
	D-8031 Eichenau, Germany				
Citizenship	Germany				
Post Office Address	same as above				
	ست جي مان علي جي جي جي جي حين جي				
Full name of eleventh j	oint				
inventor, if any	Michael J. Lenardo				
Sixth inventor's					
Signature	9117 Falls Chapel Way				
Residence	9117 Falls Chapel Way				
	FOLOMAC, MD 20834-2433				
Citizenship	U.S.A.				
Post Office Address	same as above				
· · · · · · · · · · · · · · · · · · ·					
Full name of twelfth jo	int				
inventor, if any	Chen-Ming Fan				
Seventh Inventor's					
Signature	Date				
Residence	Date 30 Warren Avenue, Apt. 2A Somerville, MA 02143				
	Somerville, MA 02143				
Citizenship	Mark Land				
Post Office Address	raiwan same as above				

Full name of thirteenth	ioint				
inventor, if any	Tom Maniatis				
Eighth Inventor's					
Signature	Date				
Residence	Date 456 Belmont Street, Apt. 17				
	watertown, MA 02172				
Citizenship	II S A				
Post Office Address	same as above				
Full name of fourteenth	·ioint				
inventor, if any					
Ninth inventor's					
	Date				
Residence	Duce				
Residence					
Citizenshin					
Post Office Address					
AUGE OLITOR MORRES					

As a named inventor, I hereby declare that:

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I believe I am the original, first and sole inventor (if only one name is listed) or an original, first and joint inventor (if plural names are listed in the signatory page(s) commencing at page 3 hereof) of the subject matter which is claimed and for which a patent is sought on the invention entitled

NUCLEAR F	FACTORS ASSO	CIATED WITH	TRANSCRIP	TIONAL RE	GULATION
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/ is	attached her	reto.		•	
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material t	knowledge the	nation of t	his applic	ation in	accordance
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	Prio	r Foreign <i>l</i>	application	(s)	Priority Claimed
(Number)	(Country)	(Day/Mont)	n/Year file	d)	Yes No
(Number)	(Country)	(Day/Mont)	n/Year file	ed)	Yes No
(Number)	(Country)	(Day/Mont)	n/Year file	ed)	Yes No

I hereby claim the benefit under Title 35, United States Code, \$120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, \$112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, \$1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

06/817,441	January 9, 1986	Abandoned
07/155,207	February 12, 1988	Abandoned
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David E. Brook		
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Leo R. Reynolds	Registration No.	20,884
Richard A. Wise	Registration No.	18,041
Patricia Granahan	Registration No.	32,227
Mary Lou Wakimura	Registration No.	31,804
Thomas O. Hoover	Registration No.	
Alice O. Carroll	Registration No.	

Send correspondence to: P	atricia Granahan, Esq.
HAMILTON, BROOK, SMITH & RE Two Militia Drive, Lexingto	YNOLDS, P.C.
Direct telephone calls to:	Patricia Granahan, Esq.
617-861-6240	

	<u> </u>
Full name of sole	
or first inventor	David Baltimore
Inventor's	DAVIA DAIGIMOIC
	Date
Signature	President's House, Rockefeller Universi
Residence	1230 York Avenue, New York, NY 10021
	2000 2020 1010000 1000 2020 100 2002
Citizenship	U.S.A.
Post Office Address	same as above
Full name of second jo	pint
inventor, if any	kanjan Sen
Second Inventor's	
Signature	Date 236 Allston Street Cambridge, MA 92139
Residence	236 Allston Street
	Tadia
Citizenship	India
Citizenship	same as above
Citizenship Post Office Address	same as above
Post Office Address Full name of third joi inventor, if any	same as above
Citizenship Post Office Address Full name of third joi inventor, if any Third Inventor's	nt Phillip A. Sharp
Citizenship Post Office Address Full name of third joi inventor, if any Third Inventor's	nt Phillip A. Sharp
Citizenship Post Office Address Full name of third joi inventor, if any Third Inventor's Signature Residence	nt Phillip A. Sharp Date 119 Grasmere Street
Citizenship Post Office Address Full name of third joi inventor, if any Third Inventor's Signature Residence	
Citizenship Post Office Address Full name of third joi inventor, if any Third Inventor's Signature Residence	
Full name of third joi inventor, if any Third Inventor's Signature Residence	same as above Int Phillip A. Sharp Date 119 Grasmere Street Newton, MA 02158 U.S.A. same as above
Citizenship Post Office Address Full name of third joi inventor, if any Third Inventor's Signature Residence Citizenship Post Office Address	
Citizenship Post Office Address Full name of third joi inventor, if any Third Inventor's Signature Residence Citizenship Post Office Address Full name of fourth jo	
Citizenship Post Office Address Full name of third joi inventor, if any Third Inventor's Signature Residence Citizenship Post Office Address Full name of fourth joinventor, if any	nt Phillip A. Sharp Date 119 Grasmere Street Newton, MA 02158 U.S.A. same as above
Citizenship Post Office Address Full name of third joi inventor, if any Third Inventor's Signature Residence Citizenship Post Office Address Full name of fourth joinventor, if any Fourth Inventor's	nt Phillip A. Sharp Date 119 Grasmere Street Newton, MA 02158 U.S.A. same as above
Citizenship Post Office Address Full name of third joi inventor, if any Third Inventor's Signature Residence Citizenship Post Office Address Full name of fourth joinventor, if any Fourth Inventor's Signature	nt Phillip A. Sharp Date 119 Grasmere Street Newton, MA 02158 U.S.A. same as above Dint Harinder Singh
Citizenship Post Office Address Full name of third joi inventor, if any Third Inventor's Signature Residence Citizenship Post Office Address Full name of fourth joinventor, if any Fourth Inventor's Signature	nt Phillip A. Sharp Date 119 Grasmere Street Newton, MA 02158 U.S.A. same as above Date 1700 East 56th Street, #1309
Citizenship Post Office Address Full name of third joi inventor, if any Third Inventor's Signature Residence Citizenship Post Office Address Full name of fourth joinventor, if any Fourth Inventor's Signature Residence	nt Phillip A. Sharp Date 119 Grasmere Street Newton, MA 02158 U.S.A. same as above
Citizenship Post Office Address Full name of third joi inventor, if any Third Inventor's Signature Residence Citizenship Post Office Address Full name of fourth joinventor, if any Fourth Inventor's Signature Residence Citizenship	nt Phillip A. Sharp Date 119 Grasmere Street Newton, MA 02158 U.S.A. same as above Date 1700 East 56th Street, #1309
Citizenship Post Office Address Full name of third joi inventor, if any Third Inventor's Signature Residence Citizenship Post Office Address Full name of fourth joi inventor, if any Fourth Inventor's Signature Residence	Date 119 Grasmere Street Newton, MA 02158 U.S.A. same as above Date 1700 East 56th Street, #1309 Chicago, IL 60637-1934

	-4-
Full name of fifth join	t.
inventor, if any	
Fifth Inventor's	
Signature	Date
Residence	9309 Greyrock Road
	Silver Springs, MD 20910
	U.S.A.
Post Office Address	same as above
	جمع سن جمل ميں بين بين بين بين بين بين جي جي جي جي جي بين بين جي
Full name of sixth join	\mathcal{L}
inventor, if any	Jonathan LeBowitz JONATHAN H. LEBOWITZ (97)
Sixth Inventor's (The Date 2/12/92
Signature \	who pate 2/12/92
Residence	27 Crescent Road 35 IRONGATE Deve
	Belmont, MA 02178 ZIONSVILLE, IN 46077
Citizenship	same as above
Post Uffice Address	same as above \(\psi\cdot\)
Full name of seventh jo	int
	Albert S. Baldwin, Jr.
Seventh Inventor's	
Signature	Date 34 South Gate Park West Newton, MA 02165
Residence	34 South Gate Park
	West Newton, MA 02165
Citizenship Post Office Address	same as above
Full name of eighth joi	
inventor, if any	Roger Clerc
Eighth Inventor's	
Signature	Date
Residence	129 Parsons Road
	Brighton, MA 02135
	Switzerland
Post Office Address	same as above
Eull some of minth doin	
Full name of ninth join	
inventor, if any	Bynn m. Corcoran
Ninth inventor's	Data
Signature	Date
Residence	109 Beacon Street, Apt. 1 Boston, MA 02116
Citiconchin	U.S.A.
Citizenship Post Office Address	same as above
POST UTITUE AUGIESS	same as anove

Full name of tenth joint	. :
	Patrick A. Baeuerle
Fifth Inventor's	
Signature	Date
Residence	Am Bogen 25
	D-8031 Eichenau, Germany
Citizenship	Germany
Post Office Address	same as above
Full name of eleventh j	
inventor, if any	Michael J. Lenardo
Sixth Inventor's	
Signature	Date Date
Residence	911/ Falls Chapel Way
	POTOMAC, MD 20854-2453
Oilieanahim	11 C X
Post Office Address	same as above
Full name of twelfth jo	int
inventor, if any	Chen-Ming Fan
Seventh Inventor's	Chen Ming Lan
Seventh inventor a	Date
Residence	Date 30 Warren Avenue, Apt. 2A Somerville, MA 02143
1100200100	Somerville, MA 02143
Citizenship	Taiwan
Post Office Address	same as above
60 60 cm to the test test test test test test test	
Full name of thirteenth	
inventor, if any	Tom Maniatis
Eighth Inventor's	
Signature	Date
Residence	456 Belmont Street, Apt. 17
	Watertown, MA 02172 U.S.A.
Citizenship	
Post Office Address	same as above
Full name of fourteenth	: ioint
inventor, if any	
Ninth inventor's	
	. — Nata
Pacidance	Date
Vestractice	
Citizenship	

As a named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated next to my name;

I believe I am the original, first and sole inventor (if only one name is listed) or an original, first and joint inventor (if plural names are listed in the signatory page(s) commencing at page 3 hereof) of the subject matter which is claimed and for which a patent is sought on the invention entitled

NUCLEAR FACTORS ASSOCIATED WITH TRANSCRIPTIONAL REGULATION

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th e spe	cification of	which (check	one)			_
	is attached he	ereto.	•	• •		
,	was filed on Application Se and was amende	rial No. 07	, 1991 /791,898	as (if	applicable	≥)
content	hereby state t s of the above as amended by	-identified	specifica	tion, inc	luding the)
nateria	acknowledge th l to the exami tle 37, Code o	nation of th	is applica	ation in	accordance	
Jnited batent ldentif invento	hereby claim f States Code, § or inventor's ied below any r's certificat tion on which	119 of any f certificate foreign appl e having a f	oreign application for illing date	plication low and h or patent	(s) for _ ave also or	
	Pric	or Foreign Ap	plication	<u>(s)</u>	Priority Claimed	
(Number) (Country)	(Day/Month/	Year file	d)	Yes No	7
(Number) (Country)	(Day/Month/	Year file	d)	Yes No	ī
(Number) (Country)	(Day/Month/	Year file	d)	Yes No	7

I hereby claim the benefit under Title 35, United States Code, \$120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, \$112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, \$1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

06/817,441	January 9, 1986	Abandoned
07/155,207	February 12, 1988	Abandoned
07/280,173	December 5, 1988	Pending
07/341,436	April 21, 1989	Pending
07/162,680	March 1, 1988	Abandoned
07/318,901	March 3, 1989	Pending
06/946,365	December 24, 1986	Pending

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

I also hereby grant additional Powers of Attorney to the following attorney(s) and/or agent(s) to file and prosecute an international application under the Patent Cooperation Treaty based upon the above-identified application, including a power to meet all designated office requirements for designated states.

David E. Brook	Registration No. 22,592
James M. Smith	Registration No. 28,043
Leo R. Reynolds	Registration No. 20,884
Richard A. Wise	Registration No. 18,041
Patricia Granahan	Registration No. 32,227
Mary Lou Wakimura	Registration No. 31,804
Thomas O. Hoover	Registration No. 32,470
Alice O. Carroll	Registration No. 33,542

HAMILTON, BROOK, SMITH & RE	
Two Militia Drive, Lexingto	n, MA 02173
Direct telephone calls to:	Patricia Granahan, Esq.
617-861-6240	

Full name of sole	
or first inventor	David Baltimore
Inventor's Signature Residence	Date
Residence	DatePresident's House, Rockefeller Universit
	1230 York Avenue, New York, NY 10021
Citizenship	U.S.A.
Post Office Address	same as above
Full name of second jo	oint
inventor, if any	Ranjan Sen
Second Inventor's	
Signature	Date
Residence	236 Allston Street
	Cambridge, MA 92139
Citizenship	India
Post Office Address	same as above
Full name of third joi	nt
inventor if any	Dhillin A Cham
Third Inventor's	Phillip A. Sharp
	Dato
Residence	Date
	Newton MA 02150
Citizenship	Newton, MA 02158 U.S.A.
Post Office Address	same as above
	Sume as above
Full name of fourth jo	pint
Inventor, if any	Harinder Singh
Fourth Inventor's Signature	Date
Residence	1700 East 56th Street, #1309
	Chicago, IL 60637-1934
Citizenship	India
Post Office Address	same as above

Full name of fifth jo	oint	
inventor, if any	Louis Staudt	
Fifth Inventor's		
Signature	Date	
Residence	9309 Greyrock Road	
	Silver Springs, MD 20910	
Citizenship	U.S.A.	_
Post Office Address_	same as above	
Full name of sixth jo	nint	
inventor, if any	Jonathan LeBowitz	
Sixth Inventor's	JOHACHAN LEBOWICZ	_
Signature	Dato	
Residence	Date	
	Relmont MA 02170	
Citizenship	Belmont, MA 02178 U.S.A.	
Post Office Address	same as above	
	Same as above	
Full name of seventh	joint	
inventor, if any	Albert S. Baldwin, Jr.	
Seventh Inventor's	10 10	•
Signature (Mut:	J. Baldwin - Date 12/31/91	
Residence	34 South Gate Park 901 GROVE ST.	•
	West Newton, MA 02165 CHAPEL HILL, NC	27514
Citizenship	U.S.A.	
Post Office Address	same as above	12/20/9
		12.
		•
De31	• •	
Full name of eighth j		
inventor, if any	Roger Clerc	
Eighth Inventor's		
Signature	Date	
Residence	129 Falsons Road	
	Brighton, MA 02135	
Citizenship_ Post Office Address	Switzerland	
Post Office Address	same as above	
Full name of minth	: L	
Full name of ninth jo	int	
inventor, if any	Lynn M. Corcoran	
Ninth inventor's		
Signature	Date	
Residence	109 Beacon Street, Apt. 1	
	Boston, MA 02116	
Citizenship Post Office Address	U.S.A.	

Full name of tenth join	عا
	Patrick A. Baeuerle
Fifth Inventor's	
Signature	Date
Residence	Am Bogen 25
**************************************	D-8031 Eichenau, Germany
Citizenship	Germany
Post Office Address	same as above
Full name of eleventh j	oint
inventor, if any	Michael J. Lenardo
Sixth Inventor's	
Signature	Date
Residence	911/ Falls Chapel Way
	Potomac, MD 20854-2453 U.S.A.
Citizenship	U.S.A.
Post Office Address	same as above
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Full name of twelfth jo	
inventor, if any	Chen-Ming Fan
Seventh Inventor's	. .
Signature	Date
Residence	30 Wallen Avenue, Apt. 2A
Citizenship	Somerville, MA 02143
Carazensnin	
	Taiwan
Post Office Address	same as above
Post Office Address	same as above
Full name of thirteenth	joint
Full name of thirteenth inventor, if any	joint
Full name of thirteenth inventor, if any Eighth Inventor's	joint Tom Maniatis
Full name of thirteenth inventor, if any Eighth Inventor's Signature	joint Tom Maniatis Date
Full name of thirteenth inventor, if any Eighth Inventor's	joint Tom Maniatis Date 456 Belmont Street, Apt. 17
Full name of thirteenth inventor, if any Eighth Inventor's Signature Residence	joint Tom Maniatis Date
Full name of thirteenth inventor, if any Eighth Inventor's Signature Residence	joint Tom Maniatis Date 456 Belmont Street, Apt. 17 Watertown, MA 02172 U.S.A.
Full name of thirteenth inventor, if any Eighth Inventor's Signature Residence	joint Tom Maniatis Date 456 Belmont Street, Apt. 17 Watertown, MA 02172
Full name of thirteenth inventor, if any Eighth Inventor's Signature Residence	joint Tom Maniatis Date 456 Belmont Street, Apt. 17 Watertown, MA 02172 U.S.A.
Full name of thirteenth inventor, if any Eighth Inventor's Signature Residence	joint Tom Maniatis Date 456 Belmont Street, Apt. 17 Watertown, MA 02172 U.S.A.
Full name of thirteenth inventor, if any Eighth Inventor's Signature Residence Citizenship Post Office Address	joint Tom Maniatis Date 456 Belmont Street, Apt. 17 Watertown, MA 02172 U.S.A. same as above
Full name of thirteenth inventor, if any Eighth Inventor's Signature Residence Citizenship Post Office Address Full name of fourteenth	joint Tom Maniatis Date 456 Belmont Street, Apt. 17 Watertown, MA 02172 U.S.A. same as above
Full name of thirteenth inventor, if any Eighth Inventor's Signature Residence Citizenship Post Office Address Full name of fourteenth	joint Tom Maniatis Date 456 Belmont Street, Apt. 17 Watertown, MA 02172 U.S.A. same as above
Full name of thirteenth inventor, if any Eighth Inventor's Signature Residence Citizenship Post Office Address Full name of fourteenth inventor, if any Ninth inventor's	joint Tom Maniatis Date 456 Belmont Street, Apt. 17 Watertown, MA 02172 U.S.A. same as above
Full name of thirteenth inventor, if any Eighth Inventor's Signature Residence Citizenship Post Office Address Full name of fourteenth inventor, if any Ninth inventor's Signature	joint Tom Maniatis Date 456 Belmont Street, Apt. 17 Watertown, MA 02172 U.S.A. same as above
Full name of thirteenth inventor, if any Eighth Inventor's Signature Residence Citizenship Post Office Address Full name of fourteenth inventor, if any Ninth inventor's	joint Tom Maniatis Date 456 Belmont Street, Apt. 17 Watertown, MA 02172 U.S.A. same as above
Full name of thirteenth inventor, if any Eighth Inventor's Signature Residence Citizenship Post Office Address Full name of fourteenth inventor, if any Ninth inventor's Signature	joint Tom Maniatis Date 456 Belmont Street, Apt. 17 Watertown, MA 02172 U.S.A. same as above

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Assistant Commissioner for Patents Washington, DC 20231

REVOCATION OF PRIOR POWERS OF ATTORNEY AND APPOINTMENT OF NEW POWER OF ATTORNEY

Sir:

Massachusetts Institute of Technology, the Assignee of certain rights, titles and interest in the patent applications listed below by virtue of Assignment documents of record in the Patent Office, hereby revokes all previous powers of attorney with respect to these patent applications heretofore granted and appoints the following attorneys with full power of substitution and revocation to prosecute applications and transact all business in the U.S. Patent and Trademark Office connected therewith:

Donald W. Muirhead Beth E. Arnold	Reg. No. 33,978 Reg. No. 35,430	Charles H. Cella John C. Gorecki	Reg. No. 38,099 Reg. No. 38,471
Matthew P. Vincent	Reg. No. 36,709	Edward J. Kelly	Reg. No. 38,936
Isabelle M. Clauss	Reg. No. (see attached)	Sayoko Blodgett-Ford	Reg. No. 40,516

all of the Patent Group of Foley, Hoag & Eliot LLP at One Post Office Square, Boston, MA 02109.

APPLICANTS	SERIAL NO.	Title	FILING DATE
Baltimore, et al.	08/418,266	Nuclear Factors Associated with Transcriptional Regulation	06 April 1995
Baltimore, et al.	08/463,397	Nuclear Factors Associated with Transcriptional Regulation	05 June 1995
Baltimore, et al.	08/464,364	Nuclear Factors Associated with Transcriptional Regulation	05 June 1995
Pomerantz, et al.	08/366,083	Chimeric Transcription Factors	29 Dec. 1994
Sen, R. and Baltimore, D.	946,365	Method of Inducible Gene Expression	23 Dec. 1986
Baeurie, P. and Baltimore, D.	07/162,680	Activation of NF-kB Precursor	01 March 1988
Baeurle, P. and Baltimore, D.	07/318,901	Activation of NF-kB Precursor	03 March 1989
Lenardo, et al.	07/341,436	NF-xB - Mediated Transcriptional Regulation	21 April 1989

The undersigned, whose title is supplied below, is empowered to sign this Revocation and New Power of Attorney on behalf of the Assignee. The original copy of this Revocation and New Power of Attorney is being filed in U.S. Patent Application No. 08/418,266.

Dated: <u>(ct 30, 1997</u>

JARMILA Z. HRBEK

PRINT OR TYPE NAME OF PERSON SIGNING

PATENT ADMINISTRATOR and

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

GENERAL REVOCATION OF PRIOR POWERS OF ATTORNEY AND APPOINTMENT OF NEW POWER OF ATTORNEY OR AUTHORIZATION OF AGENTS

Commissioner for Patents Washington, DC 20231

Dear Sir:

Ariad Pharmaceuticals, Inc., hereby revokes all previous powers of attorney and authorizations of agent previously granted to Foley, Hoag & Eliot.

The following attorneys or agents of the Patent Group at Ropes & Gray, and all other attorneys or agents affiliated with Customer No. 28120, are hereby appointed to prosecute applications and transact all business in the United States Patent and Trademark Office:

I hereby appoint Madeline F. Baer, Reg. No. 36,437; Steven J. Baughman, Reg. No. P-47,414; Johnny Y. Chen, Reg. No. 46,614; Gregory G. Glover, Reg. No. 34,173; William G. Gosz, Reg. No.: 27,787, Patricia Granahan, Reg. No. 32,227; David P. Halstead, Reg. No. 44,735; Daniel Hansburg, Reg. No. 36,156; Edward J. Kelly, Reg. No. 38,936; Robert A. Mazzarese, Reg. No. 42,852; Sanjay Sitlani, Reg. No. 47,558; Wolfgang Stutius, Reg. No. 40,256; Matthew P. Vincent, Reg. No. 36,709; as attorneys/agents to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

Please change the correspondence address for the above-identified application to:

Patent Group Ropes & Gray One International Place Boston, MA 02110-2624

Customer No.: 28120

The undersigned, whose title is supplied below, is empowered to sign this Revocation and New Power of Attorney on behalf of the Assignee.

The original copy of this Revocation and New Power of Attorney is being filed in U.S. Patent Application No. 08/975,040.

Respectfully submitted,

bldol Date

Officer

DAND L BALSTIN
Print or Type Name of Person Signing

SEMOR UP- CHIEF PAMENT COUNSEL

Title

8551955.1

As a named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated next to my name;

I believe I am the original, first and sole inventor (if only one name is listed) or an original, first and joint inventor (if plural names are listed in the signatory page(s) commencing at page 3 hereof) of the subject matter which is claimed and for which a patent is sought on the invention entitled

entitled	l		
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<u></u>	is attached he	reto.	
	was filed on Application Send was amended	November 13, 1991 rial No. 07/791,898 d on	as (if applicable)
contents	s of the above	hat I have reviewed and -identified specificati any amendment referred	on, including the
materia	l to the exami	e duty to disclose info nation of this applicat f Federal Regulations,	cion in accordance
United patent identif invento	States Code, § or inventor's ied below any r's certificat	oreign priority benefit 119 of any foreign appl certificate listed belo foreign application for e having a filing date priority is claimed:	lication(s) for power and have also patent or
	Pric	r Foreign Application(s	Priority Claimed
(Number) (Country)	(Day/Month/Year filed	
(Number	(Country)	(Day/Month/Year filed	Yes No
(Number	(Country)	(Day/Month/Year filed) Yes No

I hereby claim the benefit under Title 35, United States Code, \$120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, \$112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, \$1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

06/817,441	January 9, 1986	Abandoned
07/155,207	February 12, 1988	Abandoned
07/280,173	December 5, 1988	Pending
07/341,436	April 21, 1989	Pending
07/162,680	March 1, 1988	Abandoned
07/318,901	March 3, 1989	Pending
06/946,365	December 24, 1986	Pending

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

I also hereby grant additional Powers of Attorney to the following attorney(s) and/or agent(s) to file and prosecute an international application under the Patent Cooperation Treaty based upon the above-identified application, including a power to meet all designated office requirements for designated states.

David E. Brook	Registration No.	22,592
James M. Smith	Registration No.	28,043
Leo R. Reynolds	Registration No.	20,884
Richard A. Wise	Registration No.	18,041
Patricia Granahan	Registration No.	32,227
Mary Lou Wakimura	Registration No.	31,804
Thomas O. Hoover	Registration No.	32,470
Alice O. Carroll	Registration No.	

and	
Send correspondence to: P HAMILTON, BROOK, SMITH & RE Two Militia Drive, Lexingto	
Direct telephone calls to:	Patricia Granahan, Esq.
617-861-6240	

Full name of sole	
or first inventor	David Baltimore
Inventor's	
Signature	President's House, Rockefeller University
Residence	President's House, Rockefeller University
Nest delice	1230 York Avenue, New York, NY 10021
Citizenship	U.S.A.
Post Office Address	same as above
Full name of second jo	oint.
inventor, if any	
Second Inventor's	num jun ben
	Nato
Residence	Date
	Cambridge, MA 92139
Citizenship	India
Post Office Address	same as above
Full name of third joi	
inventor if any	DESTRUCTION OF THE PROPERTY OF
Third Inventor's	Phillip A. Sharp
Cignature	Data
Residence	Date 119 Grasmere Street Newton, MA 02158
Vesidelice	Novelor Wa 02150
Citizenship	Newton, MA U2158
Post Office Address	U.S.A.
	same as above
Full name of fourth jo	oint
Inventor, if any	Harinder Singh
Fourth Inventor's	
Signature	Date
Residence	1700 East 56th Street, #1309
	Chicago, IL 60637-1934
Citizenship	India
Post Office Address	same as above

Full name of fifth join	t
inventor, if any	
Fifth Inventor's	
Signature	Date
Residence	9309 Grevrock Road
	Silver Springs, MD 20910
Citizenship	U.S.A.
Post Office Address	same as above
Full name of sixth join	n +
inventor, if any	
Sixth Inventor's	bondenar Debowres
Signature	Date
SignatureResidence	27 Crescent Road
	Belmont, MA 02178
Citizenship	U.S.A.
Post Office Address	same as above
Full name of seventh jo	
Seventh Inventor's	Albert S. Baldwin, Jr.
	Date
Posidence	Date 34 South Gate Park
RESIDENCE	West Newton, MA 02165
Citizenship	U.S.A.
Post Office Address	same as above
Full name of eighth joi	
inventor, if any	Roger Clerc
Eighth Inventor's	Date
Signature	129 Parsons Road
Residence	Brighton, MA 02135
Citizenship	Switzerland
Citizenship	same as above
1000 011100 11001 000	
Full name of ninth join	nt
inventor, if any	Lynn M. Corcoran
Ninth inventor's	
Signature	Date
Residence	109 Beacon Street, Apt. 1
	Boston, MA 02116
Citizenship Post Office Address	U.S.A.
POST UIIICE ADDRESS	same as above

Full name of tenth joint	
inventor, if any	Patrick A. Baeuerle
Fifth Inventor's	•
Signature	Date
Residence	Am Bogen 25
	D-8031 Eichenau, Germany
Citizenship	Germany
Post Office Address	same as above
Grant and annual state of the s	
Full name of eleventh j	oint
inventor, if any	Michael J. Lenardo
Givth Inventor's	
Signature	Dat e
Residence	Date 9117 Falls Chapel Way Potomac, MD 20854-2453
Kesidence	Potomac, MD 20854-2453
Citizenship	11 0 3
Post Office Address	same as above
Post Office Address	same as above
9411 mamp of 14412512 34	
Full name of twelfth jo	Int Chan Mina Man
inventor, if any	Chen-ming ran
Seventh Inventor's	Do.L.
Signature	Date
Residence	30 Warren Avenue, Apt. 2A
	Somerville, MA 02143
Citizenship	Taiwan
Post Office Address	same as above
ب خبر مثلة عنده خبرة من فيش مثل عند هنه خبرة في فيش مند جب جب جب جب يبيش و	
Full name of thirteenth	
inventor, if any	Tom Maniatis
Eighth Inventor's	
Signature	Date
Residence	456 Belmont Street, Apt. 17
	watertown, MA 02172
Citizenship	U.S.A.
Post Office Address	same as above
	,
Full name of fourteenth	·ioint
inventor, if any	
Ninth inventor's	
	Date
Signature	
Residence	
Citizenship	
CICINCHOUITA	

As a named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated next to my name;

I believe I am the original, first and sole inventor (if only one name is listed) or an original, first and joint inventor (if plural names are listed in the signatory page(s) commencing at page 3 hereof) of the subject matter which is claimed and for which a patent is sought on the invention entitled

NUCLEAR FACTORS ASSOCIATED WITH TRANSCRIPTIONAL REGULATION

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the spe	ecification of	which (check c	one)	
	is attached he	reto.		
<u>/xx/</u>	was filed on _ Application Se and was amende	rial No. 07/7	000 F0	as (if applicable)
content	hereby state to s of the above as amended by	-identified sp	ecification,	including the
materia	acknowledge that to the examitable 37, Code o	nation of this	application	in accordance
United patent identifier inventor	hereby claim f States Code, § or inventor's fied below any or's certificat ation on which	119 of any for certificate li foreign applice having a fil	eign applica sted below a ation for pa ing date bes	ation(s) for _ and have also-
	Pric	r Foreign Appl	ication(s)	Priority Claimed
(Number	c) (Country)	(Day/Month/Ye	ar filed)	
(Number	r) (Country)	(Day/Month/Ye	ear filed)	Yes No
(Number	(Country)	(Day/Month/Ye	ear filed)	Yes No

I hereby claim the benefit under Title 35, United States Code, \$120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, \$112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, \$1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

06/817,441	January 9, 1986	Abandoned
07/155,207	February 12, 1988	Abandoned
07/280,173	December 5, 1988	Pending
07/341,436	April 21, 1989	Pending
07/162,680	March 1, 1988	Abandoned
07/318,901	March 3, 1989	Pending
06/946,365	December 24, 1986	Pending

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

I also hereby grant additional Powers of Attorney to the following attorney(s) and/or agent(s) to file and prosecute an international application under the Patent Cooperation Treaty based upon the above-identified application, including a power to meet all designated office requirements for designated states.

David E. Brook	Registration No. 22,592
James M. Smith	Registration No. 28,043
Leo R. Reynolds	Registration No. 20,884
Richard A. Wise	Registration No. 18,041
Patricia Granahan	Registration No. 32,227
Mary Lou Wakimura	Registration No. 31,804
Thomas O. Hoover	Registration No. 32,470
Alice O. Carroll	Registration No. 33,542
WIICE O. CULLOIT	,

and	
	atricia Granahan, Esq.
HAMILTON, BROOK, SMITH & RE Two Militia Drive, Lexington	
Direct telephone calls to:	Patricia Granahan, Esq.
617-861-6240	

Full name of sole	
or first inventor	David Baltimore
Inventor's	
	Date
Residence	President's House, Rockefeller University
	1230 York Avenue, New York, NY 10021
Citizenship	U.S.A.
Post Office Address	same as above
Full name of second jos	
inventor, if any \bigvee	Ranjan Sen
Second Inventor's Signature	Date 02/10/92
Residence	236 Allston Street 104 KINNAIRD S
	Cambridge, MA 92139 CAMBRIDGE MA. O
Citizenship	India \emptyset \subset
Post Office Address	same as above
Full name of third join inventor, if any Third Inventor's Signature	
Residence	119 Grasmere Street
Olt I complie	Newton, MA 02158
Citizenship	U.S.A.
Post Office Address	same as above
Full name of fourth joinventor, if any	
Fourth Inventor/s	
Signature	Date
Residence	Date 1700 East 56th Street, #1309 Chicago, IL 60637-1934
Citizenship	India
Post Office Address	same as above

-4- :

Full name of fifth joi	nt
inventor, if any	Louis Staudt
Fifth Inventor's	
Signature Residence	Date
Residence	9309 Grevrock Road
	Silver Springs, MD 20910
Citizenship	U.S.A.
Post Office Address	same as above
Full name of sixth joi	
inventor, if any	Jonathan LeBowitz
Sixth Inventor's	B -1.
Signature	Date
Residence	27 Crescent Road
	Belmont, MA U21/8
Citizenship	U.S.A.
Post Office Address	same as above
- 13	~!m#
Full name of seventh j	
inventor, if any	Albert S. Baldwin, Jr.
Seventh Inventor's	Balls.
Signature	Date34 South Gate Park
Residence	34 South Gate Park
	West Newton, MA 02165
Citizenship	U.S.A.
Post Office Address	same as above
Full name of eighth jo	int
inventor, if any	
Eighth Inventor's	Rodel Cleic
	Date
SignatureResidence	120 Parsons Poad
Residence	Brighton, MA 02135
Citizenship	Switzerland
Post Office Address	came as ahoue
rose office address	Same as above
	+
Full name of ninth joi	nt
inventor, if any	
Ninth inventor's	Zim iii colociul
• • • • • • • • • • • • • • • • • • • •	Do.k.
Signature	
Signature	Date
Residence	109 Beacon Street, Apt. 1
Residence	109 Beacon Street, Apt. 1 Boston, MA 02116
Residence Citizenship Post Office Address	109 Beacon Street, Apt. 1 Boston, MA 02116 U.S.A.

:

)

Full name of tenth join	
inventor, if any	Patrick A. Baeuerle
Fifth Inventor's	•
Signature	Date
Residence	AM Bogen 25
	D-8031 Eichenau, Germany
Citizenship	Germany
Post Office Address	same as above
Full name of eleventh j	oint
inventor, if any	Michael J. Lenardo
Siven Inventor's	
Signature	Pate Date
Residence	Potomac, MD 20854-2453 U.S.A.
	Potomac, MD 20854-2453
Citizenship	U.S.A.
Post Office Address	same as above
Full name of twelfth jo	int
inventor, if any	Chen-Ming Fan
Seventh Inventor's	
Signature	Date
Residence	Date 30 Warren Avenue, Apt. 2A Somerville, MA 02143
Citizenship	Talwan
Post Uffice Address	same as above
Full name of thirteenth	inint
inventor if any	JOINT Maniatic
inventor, if any Eighth Inventor's	TOM Maniatis
Signature	Data
Residence	Date 456 Belmont Street, Apt. 17
Nes Idence	Watertown, MA 02172
Citizenship	U.S.A.
Post Office Address	same as above
	Same as above
Full name of fourteenth	
Full name of fourteenth inventor, if any	joint
inventor, if any	
inventor, if any Ninth inventor's	joint
inventor, if any Ninth inventor's Signature	joint
inventor, if any Ninth inventor's Signature Residence	Date
inventor, if any Ninth inventor's Signature Residence	joint

As a named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated next to my name;

I believe I am the original, first and sole inventor (if only one name is listed) or an original, first and joint inventor (if plural names are listed in the signatory page(s) commencing at page 3 hereof) of the subject matter which is claimed and for which a patent is sought on the invention entitled

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(Number)	(Country)	(Day/Mont)	h/Year	filed)		Yes	No No
(Number)	(Country)	(Day/Mont	h/Year	filed)		Yes	Mo

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Patricia Granahan	Registration N	io. 32,227
Mary Lou Wakimura	Registration N	o. 31,804
Thomas O. Hoover	Registration N	o. 32,470
Alice O. Carroll	Registration N	o. 33,542

all of Hamilton, Brook, Smith and Reynolds, P.C., Two Militia Drive, Lexington, Massachusetts 02173;

Send correspondence to: Patricia Granahan, Esq.
HAMILTON, BROOK, SMITH & REYNOLDS, P.C.
Two Militia Drive, Lexington, MA 02173

Direct telephone calls to: Patricia Granahan, Esq.
617-861-6240

Full name of sole	
or first inventor	David Baltimore
Inventor's	-
Signature	Date
Residence	President's House, Rockefeller Universi
	1230 York Avenue, New York, NY 10021
Citizenship	U.S.A.
Post Office Address	same as above
Full name of second jo	
inventor, if any	
Second Inventor's	nanjan ben
	Date
Signature Residence	236 Allston Street
residence	Cambridge, MA 92139
Citizenship	India
Post Office Address	same as above
	Same as above
Full name of third joi	
inventor, if any	Phillip A. Sharp
Third Inventor's	0 10
Signature /	Date 1/3/92
Residence	119 Grasmere Street
	Newton, MA 02158
Citizenship	U.S.A.
Post Office Address	same as above
Full name of fourth jo	
inventor, if any	Harinder Singh
Fourth Inventor's	
Signature	Date
Residence	1700 East 56th Street, #1309
	Chicago, IL 60637-1934
Citizenship	India
Post Office Address	same as above

Full name of fifth join	
inventor, if any	Louis Staudt
Fifth Inventor's	
Signature	Date
Residence	9309 Greyrock Road
	Silver Springs, MD 20910
Citizenship	U.S.A.
Post Office Address	same as above
Full name of sixth joir	
inventor, if any	Jonathan LeBowitz
Sixth Inventor's	
Signature	Date
Residence	27 Crescent Road
 	Belmont, MA 02178
Citizenship	Date 27 Crescent Road Belmont, MA 02178 U.S.A.
Post Office Address	same as above
	
Full name of seventh jo	oint
	Albert S. Baldwin, Jr.
Seventh Inventor's	
Signature	Date
Residence	Date 34 South Gate Park West Newton, MA 02165
	West Newton, MA 02165
Citizenship	TI C A
Post Office Address	same as above
Full name of eighth joi	nt
inventor, if any	
Eighth Inventor's	
Signature	Date
SignatureResidence	129 Parsons Road
	Brighton, MA 02135
Citizenship	Switzerland
Post Office Address	same as above
Full name of ninth join	it .
inventor, if any	
Ninth inventor's	
Signature	Date
Residence	109 Beacon Street, Apt. 1
	Boston, MA 02116
Citizenship	U.S.A.

mull warm of bonds define	,
Full name of tenth joint	
inventor, if any	Patrick A. Daeuerie
Cianatura	Nata
SignatureResidence	Date Date
Residence	D-8031 Eichenau, Germany
Citizenship	Germany
Post Office Address	Germany same as above
rose office material	bane as above
	. On the time are the time the time are time are the time time are time time time time time time time tim
Full name of eleventh j	oint
	Michael J. Lenardo
Sixth Inventor's	
Signature	Date
Residence	9117 Falls Chapel Way
	Potomac, MD 20854-2453
Citizenship	U.S.A.
Post Office Address	Potomac, MD 20854-2453 U.S.A. same as above
	·
muss name of the selection of	* •
Full name of twelfth jo	INT Chon-Ming Ran
inventor, if any Seventh Inventor's	Chen-Mind Fan
	Date
Residence	Date 30 Warren Avenue, Apt. 2A
	Somerville, MA 02143
Citizenship	Taiwan
Post Office Address	same as above
(M)	
Full name of thirteenth	
inventor, if any	Tom Maniatis
Eighth Inventor's	Date
Signature	Date Date
Residence	The state of the s
Citizenship	Watertown, MA 02172 U.S.A.
Post Office Address	
Post Office Address	same as above
Full name of fourteenth	·ioint
inventor, if any	
Ninth inventor's	
Signature	Date
Residence	
Citizenship	

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My residence, post office address and citizenship are as stated next to my name;

I believe I am the original, first and sole inventor (if only one name is listed) or an original, first and joint inventor (if plural names are listed in the signatory page(s) commencing at page 3 hereof) of the subject matter which is claimed and for which a patent is sought on the invention entitled

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the spe	cification of	which (chec	ck one)		
	is attached h	ereto.	•		
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content	hereby state s of the abov as amended h	e-identified	l specifica	ation, inc	luding the
materia	acknowledge t l to the exam tle 37, Code	ination of t	his applic	cation in	accordance
United patent identifinvento	hereby claim States Code, or inventor's ied below any or's certification on which	\$119 of any certificate foreign apporte having a	foreign application of filing data	pplication elow and h for patent	(s) for _ ave also- or
	Pr	or Foreign	Application	n(s)	Priority Claimed
(Number	(Country)	(Day/Mont)	n/Year file	ed)	Yes No
(Number	(Country	(Day/Mont	n/Year file	ed)	Yes No
(Number	(Country	(Day/Mont	h/Year file	ed)	Yes No

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Patricia Granahan	Registration No.	
Mary Lou Wakimura	Registration No.	31,804
Thomas O. Hoover	Registration No.	32,470
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Send correspondence to: P	atricia Granahan, Esq.
HAMILTON, BROOK, SMITH & REYNOLDS, P.C. Two Militia Drive, Lexington, MA 02173	
Direct telephone calls to:	Patricia Granahan, Esq.
617-861-6240	

Full name of sole	
or first inventor	David Baltimore
Inventor's	
Signature	Date
Residence	President's House, Rockefeller Universit
•	1230 York Avenue, New York, NY 10021
Citizenship	U.S.A.
Post Office Address	same as above
Full name of second jo	pint
inventor, if any	Ranjan Sen
Second Inventor's	
Signature	Date
Residence	236 Allston Street
	Cambridge, MA 92139
Citizenship	India
Post Office Address	same as above
Full name of third joinventor, if any	int Phillip A. Sharp
Third Inventor's	
Signature	Date
Residence	Date 119 Grasmere Street
	119 Grasmere Street Newton, MA 02158 U.S.A.
Citizenship	U.S.A.
Post Office Address	same as above
Full name of fourth jo	pint
inventor, if any	Harinder Singh
	1700 East 56th Street, #1309
Signature	1700 Pool Ford Ci
Citizenship_	Chicago, IL 60637-1934
Doct Office 122	India
Post Office Address	same as above

Full name of fifth join	nt
inventor, if any	Louis Staudt
Fifth Inventor's	
Signature	Date
Residence	9309 Greyrock Road
	Silver Springs, MD 20910
Citizenship	II.S.A.
Post Office Address	same as above
Full name of sixth join	nt
inventor, if any	Jonathan LeBowitz
Sixth Inventor's	
Signature	Date
Signature Residence	27 Crescent Road
	Belmont, MA 02178
Citizenship	U.S.A.
Post Office Address	U.S.A. same as above
	
Tull name of account to	
Full name of seventh jo	oint
Seventh Inventor's	Albert S. Baldwin, Jr.
Signature	Data
Residence	Date 34 South Gate Park West Newton Ma 02165
Neb Lucinee	Wost Norten Ma 02165
	NEDE NEW COIL, IIA 02105
Post Office Address	U.S.A. same as above
•	bane as above
Full name of eighth joi	nt
inventor, if any	Roger Clerc
Eighth Inventor's	
Signature	Date
Residence	129 Parsons Road
Citizenship	Brighton, MA 02135
Post Office Address	Switzerland same as above
Post Office Address	same as above
Full name of ninth join	t
inventor, if any	Lynn M. Corcoran
Ninth inventor's	7
Signature	Date
Residence	109 Beacon Street, Apt. 1
	Boston, MA 02116
Citizenship	U.S.A.
Post Office Address	same as above

Full name of tenth joint	,
inventor, if any	Patrick A. Baeuerle
Fifth Inventor's	•
Signature	Date
Residence	Am Bogen 25
	D-8031 Eichenau, Germany
Citizenship	Germany
Post Office Address	same as above
Full name of eleventh j	oint
inventor, if any	Michael J. Lenardo
Sixth Inventor's	
Signature	Date Date
Residence	JII/ Tails Chapel Way
	FOCOMAC, MD 20854-2453
Citizenship	U.S.A.
Post Office Address	same as above

Full name of twelfth jo	int
inventor, if any	Chen-Ming Fan
Seventh Inventor's	
Signature	Date
Residence	Date 30 Warren Avenue, Apt. 2A
	Somerville, MA 02143
Citizenship	Taiwan
Post Office Address	same as above
Full name of thirteenth	
inventor, if any	Tom Maniatis
Eighth Inventor's	•
Signature	Date
Residence	Date 456 Belmont Street, Apt. 17 Watertown, MA 02172
Citizenship	U.S.A.
Post Office Address	same as above
الله عليه هذه الله الله الله عليه على الله علي منه عليه عليه عليه الله عليه عليه الله عليه عليه علي سيم عليه ا 	
Full name of fourteenth	
inventor, if any	
Ninth inventor's	
Signature	Date
Citizenship	